ALAMEDA COUNTY WATER DISTRICT

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December 9, 2013

Mr. Paul Massera
California Water Plan Update 2013
California Department of Water Resources
P.O. Box 942836
Sacramento, CA 94236-0001

Dear Mr. Massera:

Subject: Public Review Draft of California Water Plan Update 2013, Volume 2

The Alameda County Water District (ACWD) wishes to thank you for the opportunity to comment on the Public Review Draft of the California Water Plan Update 2013, Volume 2. ACWD has reviewed Volume 2 and would appreciate your consideration of the following comments:

1. Aquifer Description – Alluvial Aquifers, Page SFB-3, Figure SFB-3: This section includes a reference to Figure SFB-3, Alluvial Groundwater Basins and Subbasins within the San Francisco Bay Hydrologic Region. The source of this figure (and Figure SFB-7) is Department of Water Resources' (DWR's) Bulletin 118-2003, which contains significant errors for the northern boundary of the Niles Cone Groundwater Basin (Subbasin Number 2-9.01). As a monitoring entity for the Niles Cone Groundwater Basin in the California Statewide Groundwater Elevation Monitoring Program, ACWD has been in communication with DWR staff regarding Bulletin 118-2003 to correct the northern boundary line (see Figure 1). ACWD requests that this correction also be included in the final California Water Plan Update 2013, Volume 2.

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   According to DWR Bulletin 118-2013, the Niles Cone Groundwater Basin was established in DWR Bulletin 118-80 as the southern portion of the east bay area and is, "…bounded on the north by the boundary of Alameda County Water District, and the southern portions of the City of Hayward." However, the final digital map version of the Niles Cone Groundwater Basin's northern boundary issued with the report is not in agreement with the text description in DWR Bulletin 118-2003.

   Historically, Bulletin 118-80 was created in response to Senate Bill No. 1505, a portion of which required DWR to re-delineate California groundwater basins while taking into consideration political boundary lines whenever practical. Since ACWD manages and

intensively operates the groundwater basin beneath its boundaries, in 1979, during the creation of Bulletin 118-80, ACWD requested that the part of the basin which the District manages be separated from the northern part of the basin and that the subsequent area be referenced as the "Niles Cone Basin." Subsequently, the Niles Cone Basin was established in Bulletin 118-80 and designated as DWR Subbasin 2-9.01. The Niles Cone Basin is considered a subbasin of the greater Santa Clara Valley Groundwater Basin, because its boundaries are defined by local district boundaries (DWR, 2003).

The digital map version of the Niles Cone Groundwater Basin boundary does not follow the northern district boundaries per the text description in Bulletin 118-2003 nor does it reflect the original goal of Bulletin 118-80, which was to define groundwater basins in California to facilitate groundwater management purposes, with special attention paid to areas where groundwater basin management had already been initiated (DWR, 1980).

2 2. California Statewide Groundwater Elevation Monitoring (CASGEM) Basin Prioritization, page SFB-6, lines 19-30: This section references Figure SFB-7 and Table SFB-4, which both indicate that the Niles Cone Subbasin has been assigned a "medium" basin prioritization. Although the report provides the general criteria for basin prioritization, the report references Update 2013, Volume 4, Reference Guide, for additional information on how the prioritization is assigned to each basin. On DWR's website, Volume 4 will not be available until after the California Water Plan Update 2013 is finalized. The additional information on how each basin is prioritized should be made available for public review and comment prior to finalizing the California Water Plan Update 2013.

3 3. Water Uses, Municipal Use, page SFB-17, line 37: ACWD's per capita use is approximately 130 gpcd. See Table 8-1 of ACWD's 2010-2015 Urban Water Management Plan (UWMP); 2010 use was 128 gpcd.

4 4. Groundwater Quality, page SFB-23, lines 25-28: This section should also include the Alameda County Water District (in addition to the other three named agencies) as an agency that is developing a Salt and Nutrient Management Plan.

5 5. Groundwater Management Assessment, page SFB-36, lines 19-36: This section references Table SFB-14 and Figure SFB-19 which document groundwater management plans in the region. Figure SFB-19 indicates that the Niles Cone Groundwater Basin (it should be noted that the northern boundary appears to be correct on this diagram; refer to comment #1 above) has a groundwater management plan prior to SB 1938 with a "Hydrologic region GWMP ID number" of SF-1. However, Table SFB-14 provides incorrect information for map label "SF-1". The correct information should be:

Map Label	Agency Name	Date	County	Basin Number	Basin Name
SF-1	~~Santa Clara Valley~~	~~2001~~	~~Santa Clara~~	~~2-9.02~~	~~Santa Clara Subbasin~~
	Alameda County Water District	1989	Alameda	2-9.01	Niles Cone Subbasin

ACWD's Groundwater Management Policy (Policy) was originally adopted on January 26, 1989. On March 22, 2001, the Policy was amended and formally adopted by ACWD's

Board of Directors through Resolution No. 01-021. The Policy is intended to serve as a guide to ACWD management in the continued development and implementation of programs to manage and protect the Niles Cone Groundwater Basin and as a nontechnical document to explain ACWD groundwater programs to members of the public. On September 20, 2001, a copy of ACWD's Groundwater Management Policy was submitted to Carl Hauge, Chief Hydrogeologist of DWR.

Two components of the Policy are the annual Groundwater Monitoring Report and the annual Survey Report on Groundwater Conditions. As recognized by DWR during the Local Groundwater Assistance grant application process, ACWD's amended Policy along with current versions of ACWD's Groundwater Monitoring Report and Survey Report on Groundwater Conditions is considered to be an appropriate Groundwater Management Plan. Every year, updated versions of these reports are submitted to DWR; the most recent submittal to DWR was on August 28, 2013.

6 6. Conjunctive Management Inventory Results, page SFB-44, line 21: This line states that ACWD began its conjunctive management program in 1996. However, ACWD began its conjunctive management program in 1962, as noted on page SFB-26.

7 7. Conjunctive Management Inventory Results, page SFB-45, lines 1-5: The following information is provided so that the description about ACWD can be corrected and updated.

ACWD utilizes recharge ponds (abandoned gravel quarry pits) and sections of the Alameda Creek Flood Control Channel behind two inflatable rubber dams to store and recharge local and imported water into the aquifers of the Niles Cone Groundwater Basin.

The Niles Cone Groundwater Basin is subdivided by the Hayward Fault into two distinct subbasins known as the Above the Hayward Fault (AHF) and Below the Hayward Fault (BHF) subbasins. ACWD operates groundwater recharge facilities and wellfields in both the AHF and BHF subbasins. In general, the AHF subbasin is much smaller than the BHF subbasin, is isolated from seawater intrusion (due to the Hayward Fault which acts as a groundwater barrier), and due to its small size, has very limited storage capacity. As such, the AHF subbasin is primarily operated in a "put and take" mode whereby annual groundwater recharge and extraction are generally balanced.

Because the BHF subbasin is much larger, it is operated in a conjunctive use mode whereby water can be stored in the aquifer from one year to another. However, the amount of storage is limited due to maximum and minimum operating levels which have been established to: (1) maintain efficiency of recharge operations (if groundwater elevations are maintained too high, recharge appears to accomplish little additional net storage), and (2) prevent seawater intrusion (if groundwater elevations are too low). The operating criteria for the recharge facilities and the groundwater basin are continuously evaluated to optimize the use of these resources.

In wet years when local supplies are abundant, ACWD does not require delivery of all of its state water allocation, and therefore allows some to be diverted to the Semitropic Water

Storage District (SWSD) in Kern County through a water banking agreement (150,000 acre-feet secured capacity). This agreement allows ACWD to subsequently recover this water during dry or sub-normal years when it is needed. Recovery is physically accomplished through an exchange, whereby ACWD receives SWP water that would otherwise be allocated to the SWSD, or to other state water contractors that, in turn, can be compensated through deliveries from the SWSD.

To justify replenishment assessment rates paid by private well pumpers, ACWD carefully discerns groundwater basin program costs from its distribution system and water production costs. Costs are determined on a fiscal year (FY) basis (July 1 through June 30). The total actual cost for groundwater basin programs in FY 2011/12 was $12,706,000, which consisted of $3,670,000 of State Water Project costs (the portion allocated to the groundwater basin), $7,597,000 in other basin operating expenses, and $1,439,000 in basin capital costs. The annual change in operating expenses and State Water Project costs is relatively gradual, but capital costs have tended to have greater fluctuation from one year to the next, commensurate with infrastructure needs and construction project scheduling. Largely due to a federal Endangered Species Act mandate to install fish screens and fish ladders at the recharge facilities, the capital cost for the groundwater basin in FY 2012/13 was $3,692,000, and is projected to average at approximately $9 million per year through FY 2016/17, before dropping back to $3 million in FY 2017/18. Projections of costs are subject to revision.

8 8. ACWD Contacts: The following ACWD contacts are provided so that DWR can coordinate with ACWD as needed during the development of the final California Water Plan Update 2013, Volume 2:

- Eric Cartwright, Water Resources Planning Manager, at (510) 668-4206, or by e-mail at eric.cartwright@acwd.com, for coordination regarding water supply issues.

- Steven Inn, Groundwater Resources Manager at (510) 668-4441, or by e-mail at steven.inn@acwd.com, for coordination regarding ACWD's groundwater resources.

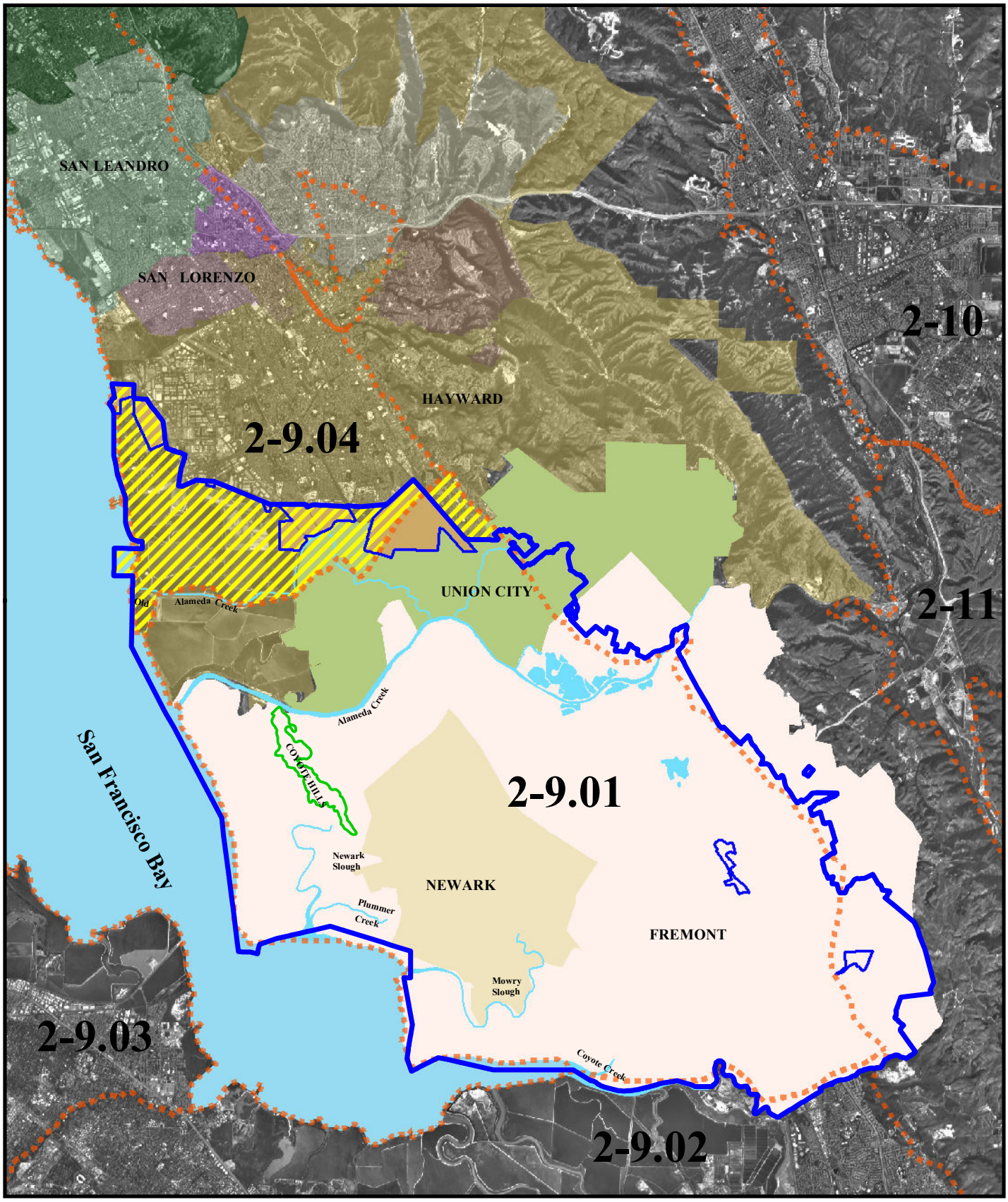
Thank you for the opportunity to comment on the Public Review Draft of the California Water Plan Update 2013, Volume 2.

Sincerely,

Robert Shaver
Assistant General Manager - Engineering

si/tf
By E-mail
cc: Eric Cartwright, ACWD
Steven Inn, ACWD

FIGURE 1: LOCAL AGENCY BOUNDARIES



Difference in the Northern Portion of the Niles Cone Groundwater Basin and the DWR Basin Boundaries

Niles Cone Groundwater Basin

DWR Groundwater Basins (Niles Cone: 2-9.01**)

N
W E
S

0 1 2 Miles

**According to DWR Bulletin 118-80 and DWR Bulletin 118 (2003), the boundaries of the Niles Cone Groundwater Basin are described as the southern portion of the east bay area bounded on the south by the Alameda-Santa Clara County boundary and on the north by the boundary of Alameda County Water District. The digital groundwater basin boundaries map accompanying Bulletin 118 (2003) shown here is inconsistent with the existing basin description, especially in the northwestern corner of the basin. DWR has been notified of the error and will review the data for the next update of Bulletin 118.